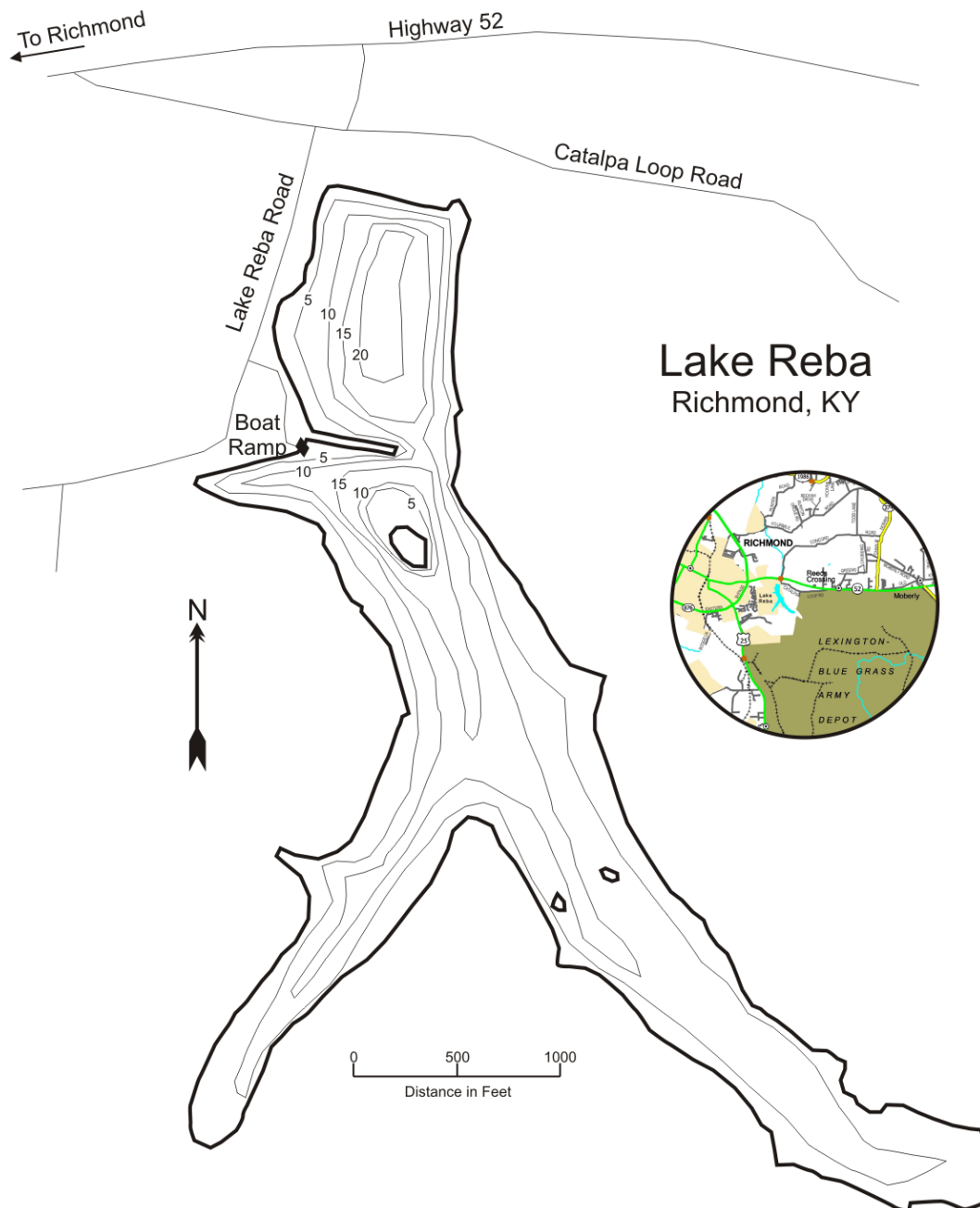


## Lake Reba Bass Assessment 2013

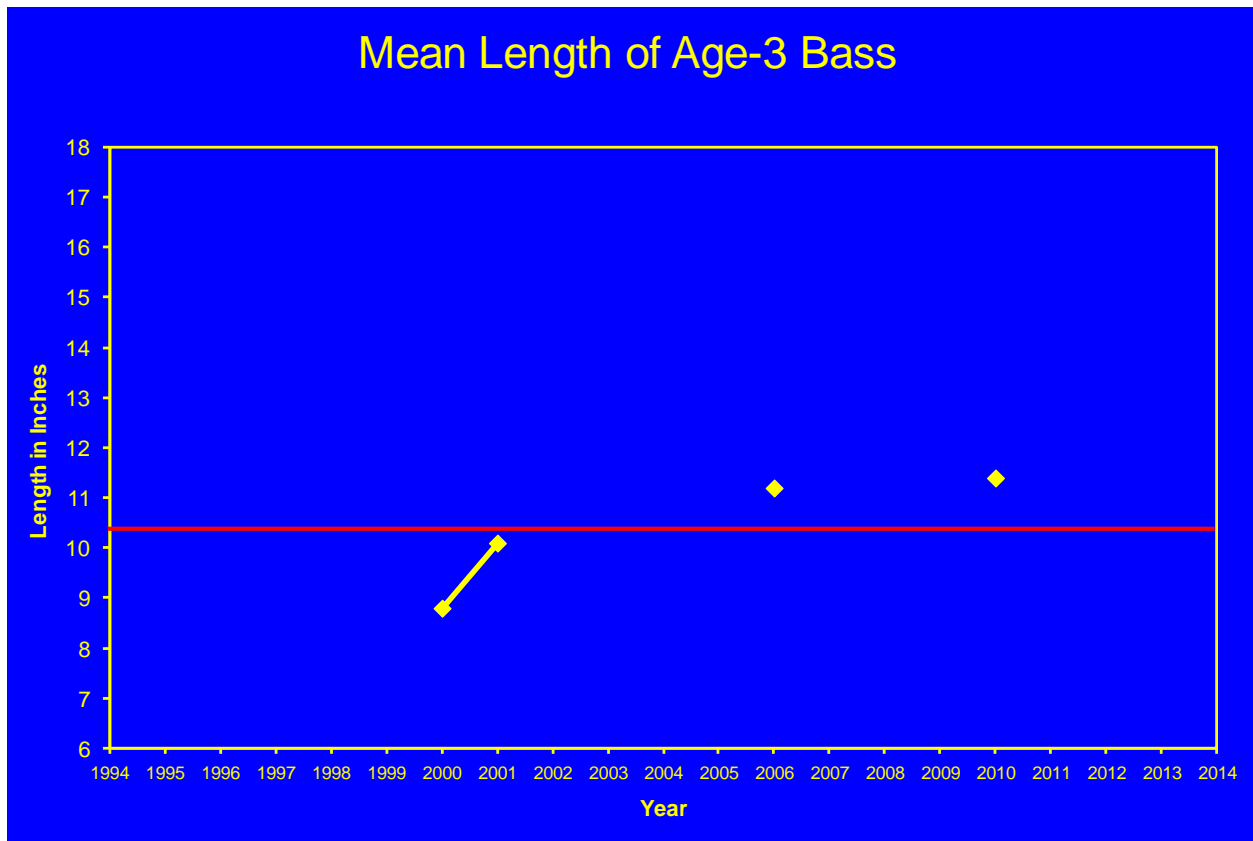
Lake Reba is a 76 acre reservoir located just to the east of Richmond in Madison County. The lake was created in the 1890's by impounding Otter Creek in the Kentucky River drainage. The lake has taken several forms over the last century but in the 1990's a new dam was built creating the present form of Lake Reba. It is bordered by Gibson Bay Golf Course, Richmond City Park, Catalpa Park and the Bluegrass Army Depot. It is a popular destination for anglers fishing for largemouth bass, channel catfish, and sunfish species (namely bluegill and redear sunfish). Please see "Understanding the Largemouth Bass Assessment" article for an explanation of how the assessment works.

*Please note there is a 15.0 inch minimum size limit on largemouth bass and a 3 fish daily creel limit. Possession of shad for bait is prohibited in this lake and there is an electric motor only restriction on all boats.*



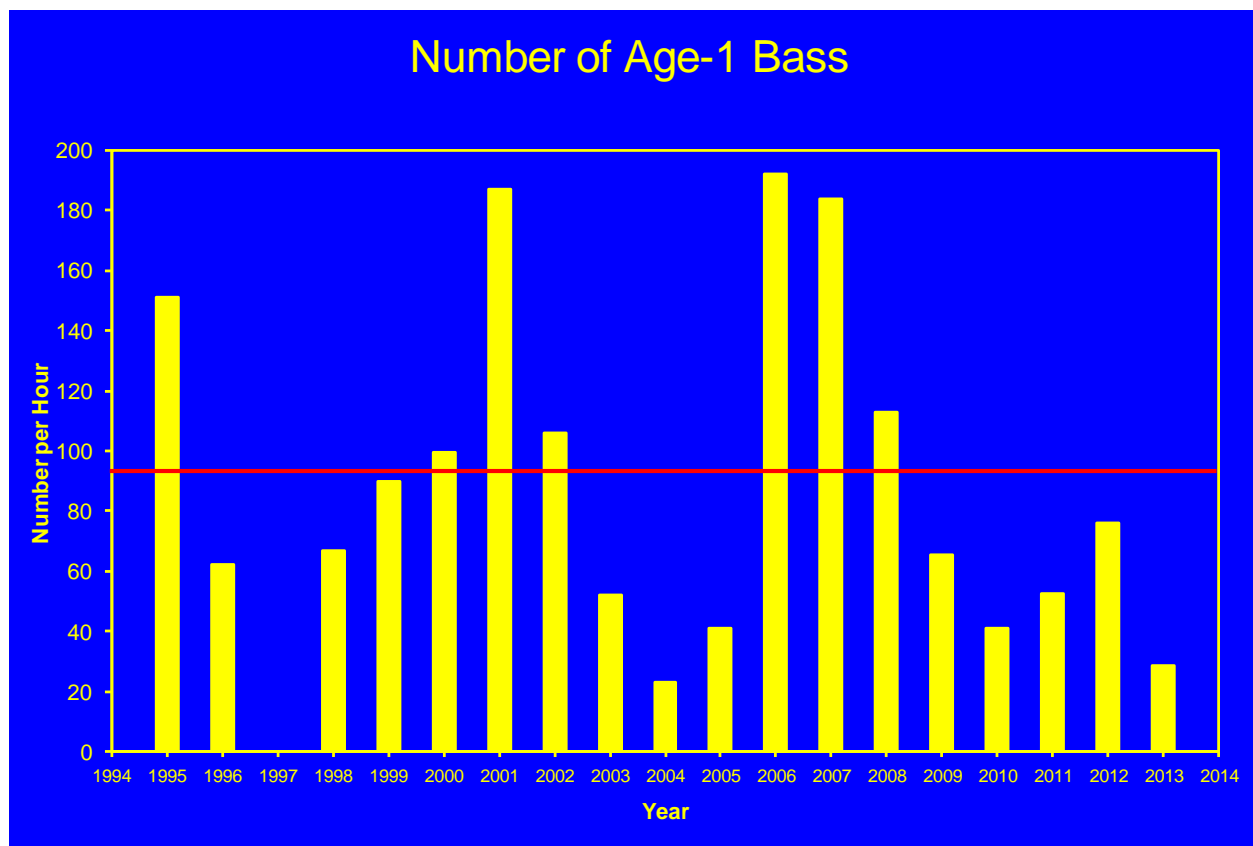
## Parameter 1 – Length at age-3 (growth rate)

At Lake Reba the length of age-3 fish has averaged 10.38 inches since 1995 (represented by the red line). When compared to other lakes of similar size in Kentucky this is considered fair growth for largemouth bass. Over the last five years this parameter has increased to 11.2 inches and 11.4 inches which would be considered good growth and marginally excellent growth. Growth rates are generally related to factors such as population density, food resources and weather patterns. The last year that KDFWR aged largemouth bass at the lake was 2010. In general, largemouth bass reach a harvestable size of 15.0 inches in their 4<sup>th</sup> or 5<sup>th</sup> year, which is similar to lakes of this size and in the same region.



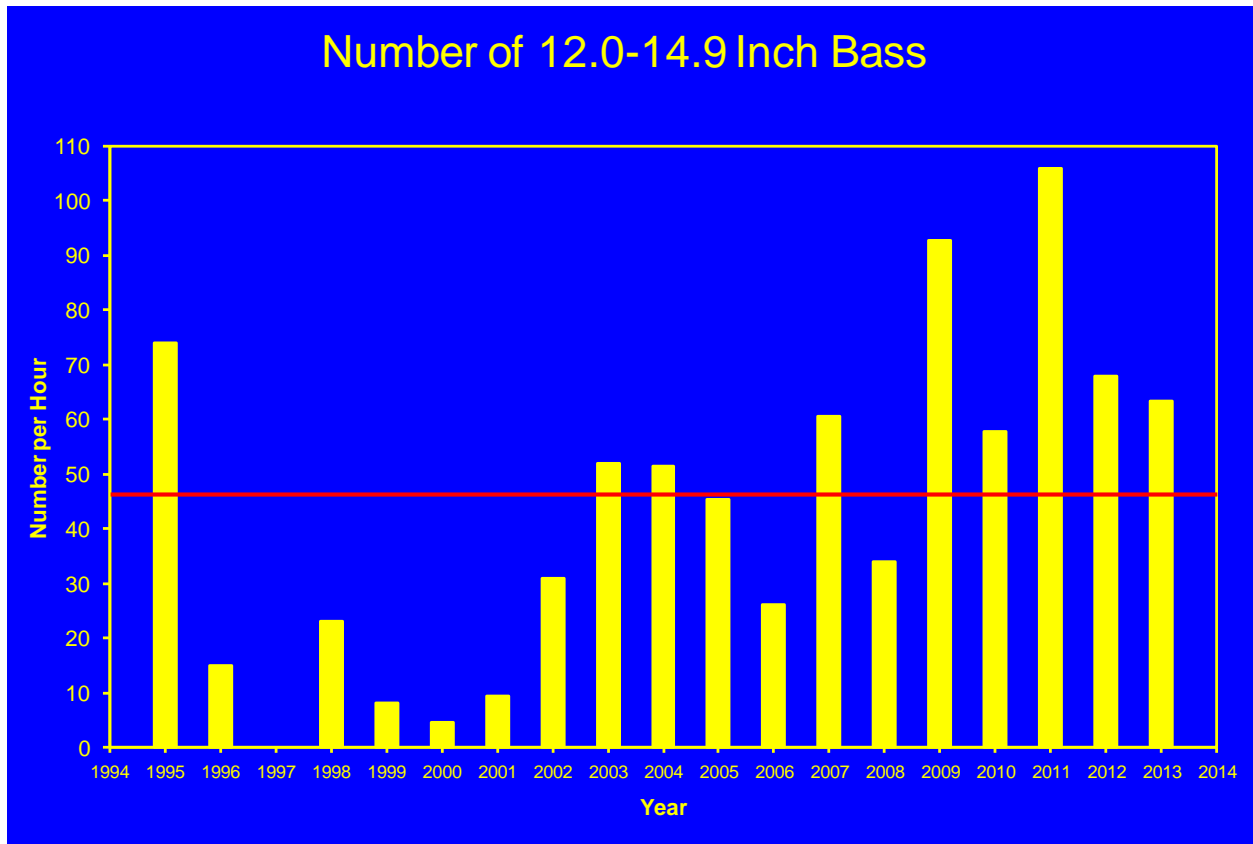
## Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. Since 1995, Lake Reba has averaged around 90.00 age-1 bass captured per hour. This is considered to be excellent when compared to other lakes of similar size. However, the mean catch rate from 2009 to 2013 has remained below the 20 year average. Catch rates of age-1 fish could be related to factors such as food availability, predation on these young fish and weather or lake conditions during the spawn. KDFWR supplemented poor recruitment by stocking fingerling largemouth bass (under 5.0 inches) in the lake in 2008, 2009, 2010 and 2013.



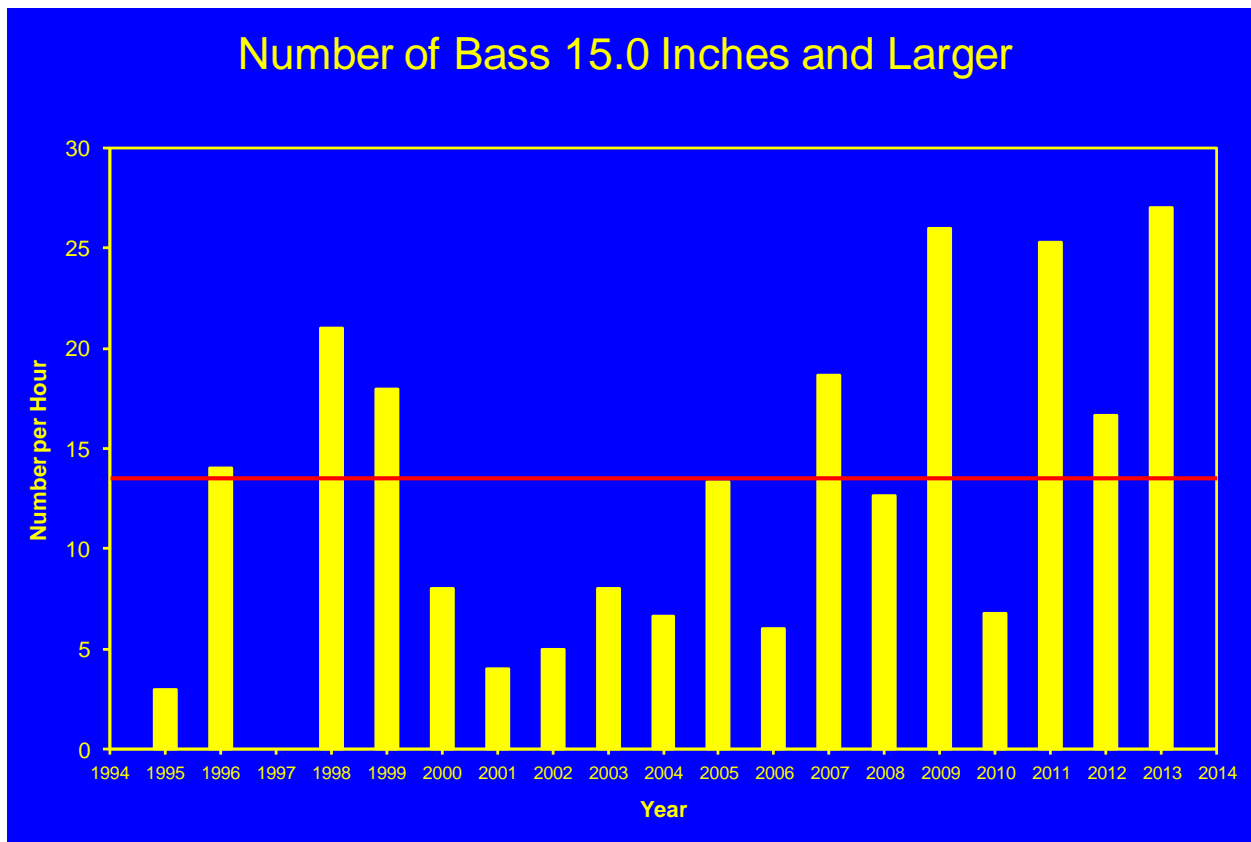
### Parameter 3 – Numbers of 12.0-14.9 inch bass

Since 1995 the electrofishing catch of 12.0-14.9 inch largemouth bass in Lake Reba has averaged around 45.00 f/h which is good when compared to other lakes of similar size. This catch rate has fluctuated since 2009 but has remained above the mean and is considered to be excellent. High abundance of fish in the 12.0-15.0 inch range is expected given the protection provided by the 15.0 inch minimum size limit.



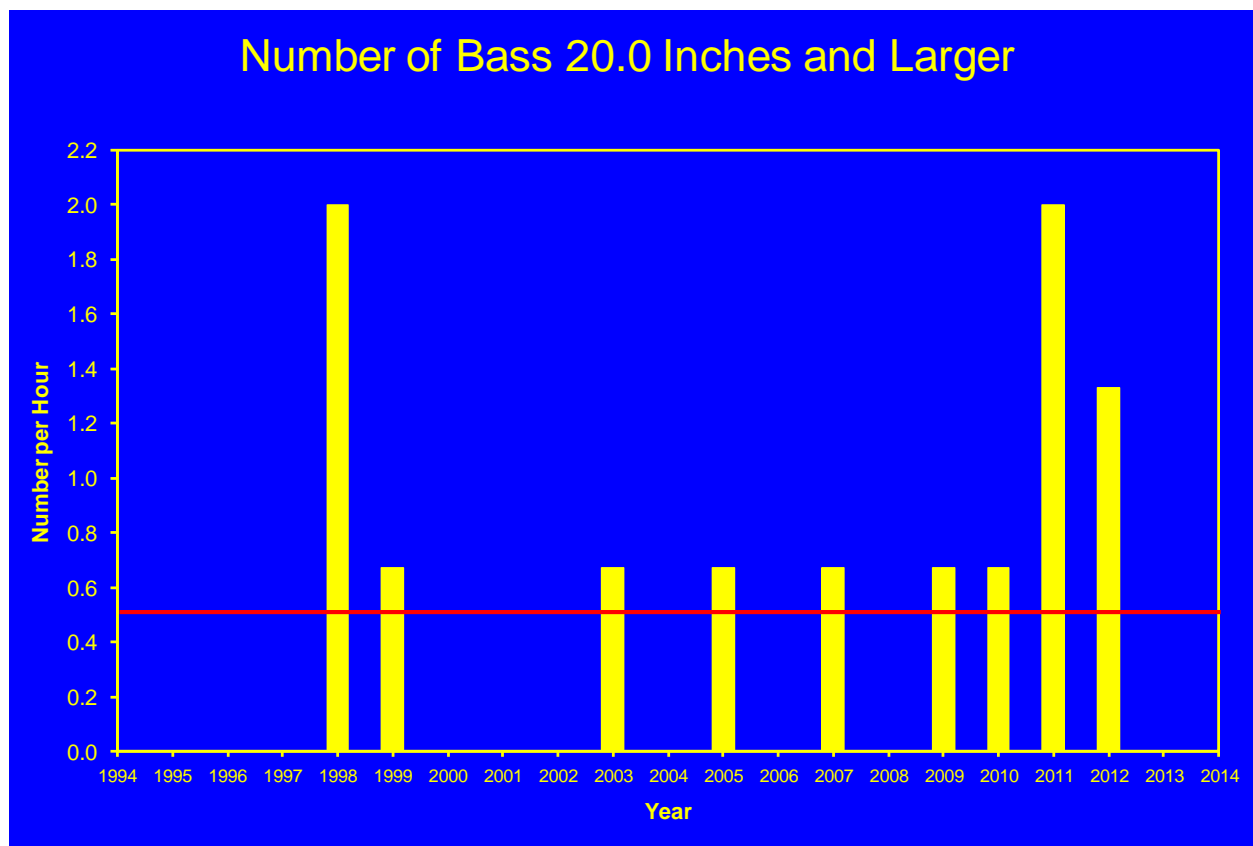
## Parameter 4 – Numbers of 15.0 inch and larger bass

The electrofishing catch rate of 15.0 inch and larger largemouth bass has averaged over 13.00 f/h since 1995. This is considered to be fair when compared to other lakes of similar size. The trend for this size class appears to be a high year followed by a down year as shown by the high years of 2007, 2009, 2011 and 2013 followed by lower years in 2008, 2010 and 2012. In spite of it being in a down year in 2012, the catch rate was still 16.67 f/h and on the upper end of the fair scale and above the mean.



## Parameter 5 – Numbers of 20.0 inch and larger bass

The electrofishing catch rate of 20.0 inch and larger largemouth bass has averaged 0.52 f/h since 1995. This is considered to be poor when compared to other lakes of similar size. Prior to 2010, this number had been fairly consistent, but recent catch rates have jumped to 2.00 f/h, 1.33 f/h (which are considered to be good and fair, respectively) and then down to 0. Due to the boost in 2011 and subsequent declines in 2012 and 2013 this appears to most likely be a short term boost, not a trend. While there are a few 20.0 inch or larger fish in Lake Reba, better opportunities for large fish may be found at other lakes in the area.



### Overall – Total Assessment Score (All five parameters added together)

Overall, when compared to other lakes of similar size in Kentucky, the largemouth bass fishery at Lake Reba has been fair to good since 1995. Since 1995 the lake has rated good 9 times with 6 of those 9 years occurring since 2003.

